

We claim:

1. An illumination system for directing light onto a vehicle tire comprising a light source for directing light onto a vehicle tire, a power supply connected to the light source, and control means for flashing the light source at one of a plurality of fixed frequencies independent of rotational speed of the vehicle tire.
2. An illumination system as in claim 1 wherein the fixed frequencies include three flashes per second, seven flashes per second and eleven flashes per second.
3. An illumination system as in claim 2 in combination with a vehicle tire with indicia on sidewall portions of the tire.
4. An illumination system for directing controlled flashes of light onto a vehicle wheel, the system including a housing, constructed and arranged to rotate with a vehicle wheel, a cavity within the housing, lighting and control means therefore within the cavity, and window means in the housing for directing lighting from the cavity onto a vehicle wheel, whereby the control means is constructed and arranged to flash the lighting at a frequency related to rotational speed of the wheel.
5. An illumination system as in claim 4 in combination with a vehicle wheel.
6. An illumination system as in claim 5 wherein the vehicle wheel has spaced apart spokes with spaces therebetween.
7. An illumination system as in claim 6 wherein the windows in the housing open onto the spokes of the wheel and the spaces therebetween.
8. An illumination system as in claim 7 wherein the lighting comprises a circular array of spaced apart LEDs.

9. An illumination system as in claim 8 wherein the control means includes a battery and microprocessor.

10. An illumination system as in claim 7 including spoke lenses above each spoke connected to the housing above the windows whereby light passes through the windows onto the spoke lenses.

11. An illumination system as in claim 7 wherein the lighting comprises two spaced apart circular arrays of spaced apart LEDs.

12. An illumination system as in claim 7 wherein the lighting and control means therefore remain substantially stationary when the vehicle wheel rotates.

13. An illumination system as in claim 12 including a magnet connected to rotate with the housing, and a magnetic sensor on the control means for the lighting for determining the rotational speed of the vehicle wheel.

14. An illumination system as in claim 13 wherein the control means flashes the lighting in direct relationship to the rotational speed of the vehicle wheel whereby the spokes and spaces therebetween appear stationary.

15. An illumination system as in claim 13 wherein the control means flashes the lighting at a frequency higher than the rotational speed of the vehicle wheel whereby the spokes and spaces therebetween appear to slowly rotate backward.

16. An illumination system as in claim 13 wherein the control means flashes the lighting at a frequency lower than the rotational speed of the vehicle wheel whereby the spokes and spaces therebetween appear to slowly rotate forward.

17. An illumination system as in claim 4 wherein the lighting comprises ultraviolet radiation.

18. An illumination system as in claim 4 wherein the lighting comprises infrared radiation.

19. An illumination system as in claim 4 wherein the window means extends 360° around the housing.

20. An illumination system for directing controlled flashes of light onto a vehicle wheel, the system including a housing constructed and arranged to rotate with a vehicle wheel, a cavity within the housing, lighting and control means therefore within the cavity, window means in the housing for directing light from the cavity onto a vehicle wheel, whereby the control means is constructed and arranged to flash the lighting at a desired frequency.